

METHODS AND APPARATUS FOR DISPLAYING  
BLISTER PACKAGES

BACKGROUND OF THE INVENTION

[0001] This invention relates generally to display racks, and more particularly, to methods and apparatus for displaying blister packages.

[0002] At least some known consumer goods are packaged for retail sale in display packages which include a substantially planar backing sheet on which the consumer good is mounted so as to be visible when displayed on a display rack. For example, at least some such display packages are known as blister packages wherein the consumer good being sold is contained within a plastic enclosure that is coupled to the backing sheet. Within at least some blister packages, the plastic enclosure includes at least a portion that is contoured substantially in shape and size to the consumer good contained therein.

[0003] To facilitate displaying blister packages, at least some known display racks include a plurality of hanger members which extend outwardly from the display rack. The hanger members are inserted through openings formed within the backing sheets, such that the blister packages are suspended from the display rack. Generally, the backing sheet and plastic enclosure are discarded after the consumer good has been removed from the display packaging. However, if the packaged consumer good houses a consumer good that is deemed collectible, the value of the collectible is generally enhanced if the collectible is retained in its original packaging. Accordingly, collectors generally do not open the blister packaging. For example, metal die-cast, reduced-scale automobile models of authentic racing stock cars, or miniature figurines of current and past sports participants, such as baseball, football, and/or basketball players, have become increasingly more collectible in recent years. However, the original packaging may be an inconvenience and an annoyance which collectors endure to facilitate increasing the value of the consumer good contained within the packaging. Specifically, when maintained in their original packaging,

collectible goods may be difficult to neatly and compactly display, and as such, may detract from the attractiveness of the collection display.

[0004] Accordingly, at least some known display racks are sized to display the collectible goods while maintained within their original blister packaging. At least some known display racks include a pair of opposed rails that are mounted generally horizontally to a support structure. The rails are spaced apart such that a blister package may be inserted therebetween such that the lower edge of the blister package is against the lower rail, and such that at least a portion of the backing sheet is tucked loosely behind the upper rail, between the upper rail and the support structure. As such, the blister packages are only moderately maintained in their position, and furthermore, the display racks are limited to only being oriented in a generally horizontal arrangement.

[0005] Other known display racks include a plurality of openings formed in a display sheet. The plastic enclosure is inserted through the opening and each backing sheet remains behind the display sheet. Accordingly, when the display sheet is coupled to a support structure, removing any of the blister packages from the display sheet is difficult without uncoupling the sheet from the support structure.

#### BRIEF SUMMARY OF THE INVENTION

[0006] In one aspect, a display rack for displaying at least one blister package is provided. The display rack includes a first elongated rail, a second elongated rail, and a siderail support member. The first and second elongated rails each include a first end, a second end, and a channel extending therebetween. The siderail support member extends substantially perpendicularly between the first and second elongated rail first ends such that the channel defined within the first elongated rail substantially mirrors that defined within the second elongated rail channel such that a display area is defined between the first and second elongated rail channels. The first elongated rail is spaced a distance from the second elongated rail such that the display area is sized to receive at least one blister package therein, and such that

the at least one blister package is retained within the display area by the first and second elongated rail.

[0007] In another aspect, a display rack assembly for displaying at least one blister package is provided. The display rack assembly includes at least one pair of opposed elongated rail that are coupled together by a first support rail that extends between adjacent ends of the pair of elongated rails. The display rack assembly also includes a second support rail that extends between adjacent opposite ends of the elongated rails. Each of the elongated rails includes an outer surface, an inner surface, and a channel that extends therebetween. Each of the channels extends from the first support rail at least partially towards the opposite ends of each respective elongated rail. The pair of elongated rails are spaced apart such that a display area is defined between the pair of elongated rails. The display area is sized to receive at least one blister package therein such that opposite sides of each blister package are slidably coupled within the pair of elongated rail channels.

[0008] In a further aspect, a method of displaying blister packages within a display rack is provided. The method comprises coupling a first elongated rail to a support member, wherein the first elongated rail includes a first end, a second end, and a channel extending from the first end at least partially towards the second end, and positioning a second elongated rail adjacent the support member, wherein the second elongated rail includes a first end, a second end, and a channel extending from the first end at least partially towards the second end. The method also comprises coupling the second elongated rail to the support member such that the channel defined within the second elongated rail substantially mirrors that of the first elongated rail, coupling the assembly to a support structure, and slidably coupling at least one blister package into a display area defined between the opposed channels such that opposite sides of the blister package are received within the channels for retention within the display rack..

## BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Figure 1 is a perspective view of an exemplary known metal die-cast, reduced-scale automobile model contained in a blister package;

[0010] Figure 2 is a schematic view of an exemplary display rack assembly that may be used to display a plurality of blister packages, such as the blister package shown in Figure 1;

[0011] Figure 3 is an enlarged perspective view of a channel member used with the display rack assembly shown in Figure 2;

[0012] Figure 4 is a side view of the display rack assembly shown in Figure 2; and

[0013] Figure 5 is an alternative embodiment of a display rack assembly that may be used to display a plurality of blister packages, such as the blister package shown in Figure 1.

## DETAILED DESCRIPTION OF THE INVENTION

[0014] Figure 1 is a perspective view of an exemplary known metal die-cast, reduced-scale automobile model 10 contained in a blister package 12. For example, reduced-scale automobile model 10 may be, but is not limited to being, commercially available from Mattel, Incorporated, Funline Merchandise Company, and/or Playing Mantis, Incorporated. In alternative embodiments, blister package 12 may contain other consumer good, such as, but not limited to, sports figurines, toys, dolls, or model railroad paraphernalia. Moreover, it should be noted that blister package 12 is not limited to the exemplary embodiment shown, and that rather, blister package 12 is representative of one conventional form of package in which collectible good is sold by retailers. Accordingly, alternative retail package orientations are possible.

[0015] In the exemplary embodiment, blister package 12 includes a generally planar hanger card or backing sheet 20 which supports one model 10 within a transparent enclosure or blister 22. Enclosure 22 is coupled to, and extends outwardly from a forward face 24 of backing sheet 20. In the exemplary embodiment, backing sheet 20 has a width  $W$ , measured between opposing side edges 21, that is wider than a width  $W_2$  of enclosure 22, and a height  $H$ , measured between opposing side edges 21, that is taller than a height  $H_2$  of enclosure 22.

[0016] Figure 2 is a schematic view of an exemplary display rack assembly 40 that may be used to display a plurality of blister packages 12. Figure 3 is an enlarged perspective view of a channel member 42 used with display rack assembly 40. Figure 4 is a side view of display rack assembly 40. In the exemplary embodiment, rack assembly 40 includes a plurality of display racks 44 coupled together. In an alternative embodiment, display rack assembly 40 includes only one display rack 44. Each display rack 44 is fabricated from a plurality of elongated channel members 42. Specifically, each display rack 44 includes a pair of primary support rails 48 and 50 that are coupled together by at least one lateral siderail support 52. In the exemplary embodiment, siderail support 52 has a substantially rectangular cross-sectional profile. Alternatively, siderail support 52 has a non-rectangular cross-sectional profile, such as but not limited to, an L-shaped cross-sectional profile.

[0017] Siderail support 52, in the exemplary embodiment, extends substantially perpendicularly between rails 48 and 50, such that rails 48 and 50 are substantially parallel. In an alternative embodiment, rails 48 and 50 are not parallel to each other. In the exemplary embodiment, rails 48 and 50 are identical and each includes a first end 54, an opposite second end 56, and a channel 58 extending therebetween along a length  $L$  of rails 48 and 50. In an alternative embodiment, channel 58 extends only partially between ends 54 and 56 along length  $L$ . In a further alternative embodiment, rails 48 and 50 are not identical.

[0018] In the exemplary embodiment, each rail 48 and 50 has a substantially J-shaped cross-sectional profile and each includes an inner surface 60

and an external surface 62. Alternatively, each rail 48 and 50 has a different shaped cross-sectional profile, such as, but not limited to a U-shaped or generally box-end cross-sectional profile. Accordingly, in the exemplary embodiment, channel 58 is defined by inner surface 60. External surface 62 extends substantially continuously from an inner side 64 of each rail 48 and 50 to an outer side 66 of each rail 48 and 50.

[0019] Each end 56 of rails 48 and 50 is coupled to siderail support 52 such that rails 48 and 50 are separated by a distance D measured across an inner side of rails 48 and 50, such that rails 48 and 50 substantially mirror each other in the exemplary embodiment. In an alternative embodiment, siderail support 52 extends between rails 48 and 50, but does not extend between rail ends 56. Distance D ensures that a display area 70 is defined between rails 48 and 50. More specifically, display area 70 extends between rails 48 and 50 and is bordered by opposed channels 58. Accordingly, because rails 48 and 50 are in a mirrored orientation, display area 70 has a width  $W_4$  that is measured with respect to rail inner sides 64, and a slightly wider width (not shown in Figures 2-4) when measured with respect to channel inner surface 58. Display area widths  $W_3$  and  $W_4$  are variably selected to be slightly larger than either blister package enclosure width  $W_2$  and/or blister package backing sheet width  $W$ , depending on the amount and type of blister packages 12 desired to be displayed. Moreover, rail lengths L are variably selected depending on the amount and type of blister packages 12 desired to be displayed.

[0020] In the exemplary embodiment, a hanger support 80 extends substantially perpendicularly between rail ends 54. Alternatively, hanger support 80 may be coupled only to either rail 48 or 50, depending upon a desired display orientation of that respective display rack 44. In a further alternative embodiment, hanger support 80 extends non-perpendicularly between rails 48 and 50. In another alternative embodiment, rack display assembly 40 does not include hanger support 80, but rather includes at least one additional siderail support 52. In a further alternative embodiment, rack display assembly 40 includes a plurality of support members 52 that are spaced along display rack length L to facilitate providing additional structural support to each respective display rack 44. In the exemplary embodiment, hanger

support 80 is fabricated identically with rails 48 and 50 and is a channel member 42. Alternatively, hanger support 80 may have any cross-sectional profile that enables hanger support 80 to function as described herein.

[0021] Hanger support 80 is coupled to rails 48 and 50 such that an inner side 64 of hanger support 80 is coupled against each rail inner side 64. Accordingly, a channel 58 extending through hanger support 80 faces away from display area 70, thus enabling hanger support 80 to function as a hanger assembly such that display rack 44 may be coupled to a support structure 88. Support structure 88 may be, but is not limited to being a wall, a panel, or a sheet of rigid material.

[0022] Display rack assembly 40 also includes a structural support mount 90 that is coupled to support structure 88 and enables at least one display rack 44 to be coupled to support structure 88. Specifically, in the exemplary embodiment shown in Figure 2, support mount 90 enables a plurality of display racks 44 to be removably coupled to support structure 88. In the exemplary embodiment, support mount 90 is fabricated identically with rails 48 and 50, and/or with hanger mount 80, and is a channel member 42. Alternatively, support mount 90 may have any cross-sectional profile that enables support mount 90 to function as described herein. Specifically, a channel 58 extending through support mount 90 provides a surface for each hanger mount 80 to couple thereto such that each respective display rack 44 is suspended from support mount 90 by hanger mount 80. More specifically, in the exemplary embodiment, display rack 44 is suspended from support mount 90 such that display rack 44 is in a generally vertical orientation with respect to support mount 90. Alternatively, hanger mounts 80 may be coupled to other areas of each rack 44 to enable that respective display rack 44 to be oriented in a non-vertical orientation, for example, such that members 48 and 50 are generally horizontally-oriented with respect to, and/or substantially parallel to, support mount 90. In other alternative embodiments, display rack assembly 40 is not suspended from support structure 88, but rather is fixedly secured to support structure 88 using a plurality of fasteners, for example.

[0023] In the exemplary embodiment, rails 48 and 50, support mount 90, hanger mount 80, and siderail support 52 are each fabricated from a metallic material. In alternative embodiments, display rack assembly 40 and its associated components are fabricated from any non-metallic material that enables display rack assembly 40 to function as described herein.

[0024] During use, a plurality of blister packages 12 may be supported by rack assembly 40 and displayed within each respective display area 70. More specifically, each blister package 12 is inserted within display area 70 such that opposite side edges 21 or side edges 23 of backing sheet 20 are inserted within opposing channels 58. Accordingly, when edges 21 or 23 are inserted within opposing channels 58, that respective blister package 12 is slidably coupled within display area 70 such that enclosure 22 and at least a portion of blister package backing sheet forward surface 24 is visible within display area 70. Moreover, because rails 48 and 50 are in a mirrored orientation, and because display area widths  $W_3$  and  $W_4$  are variably selected to be slightly larger than either blister package enclosure width  $W_2$  and/or blister package backing sheet width  $W$ , blister packages 12 are retained within display area 70 by rails 48 and 58. Moreover, depending on the display area widths  $W_3$  and  $W_4$  selected, when inserted within display area 12, the amount of backing sheet 20 to be displayed with enclosures 22 varies. For example, in the exemplary embodiment, adjacent blister package backing sheets 20 overlap when a plurality of blister packages 12 are removably coupled within display area 70. Alternatively, blister packages 12 may be removably coupled within display area 70 such that adjacent blister package backing sheets do not overlap when a plurality of blister packages 12 are removably coupled within display area 70.

[0025] Figure 5 is an alternative embodiment of a display rack assembly 100 that may be used to display a plurality of blister packages, such as blister package 12 (shown in Figure 1). Display rack assembly 100 is substantially similar to display rack assembly 40 (shown in Figures 2-4) and components of rack display assembly 100 that are identical to components of rack display assembly 40 are identified in Figure 5 using the same reference numerals used in Figures 2-4.



Accordingly, rack display assembly 100 includes a plurality of display racks 44 for use in displaying blister packages 12. However, rather than each being suspended in a generally planar manner to a support structure, such as support structure 88 (shown in Figure 2), adjacent racks 40 are coupled together using a plurality of end caps 110 such that display rack assembly 100 is free-standing. Moreover, although only two racks 40 are illustrated in Figure 5, it is contemplated that more than two racks 40 may be coupled together depending on a desired geometric configuration for rack assembly 100.

[0026] In addition, in alternative embodiments, display rack assembly 100 includes a hanger mount 80 that extends from a first side 112 of display rack assembly 100 to an opposite side 114 of display rack assembly 100. Accordingly, hanger mount 80 enables display rack assembly 100 to be removably coupled to support structure 88 via support mount 90 such that display rack assembly 100 is suspended from support mount 90. As such, display rack assembly 100 can be used in conjunction with, or adjacent display rack assembly 40.

[0027] The above-described display rack assembly is cost-effective and highly reliable. The display rack assembly includes a pair of opposed rails that each define a channel at least partially therein. The members are retained in a spaced-apart orientation by at least one siderail support member such that a display area is defined between the rails. The overall dimensions of the display area are variably selected depending on the amount, size, and type of blister packages being displayed, as well as the amount of each blister package that is desired to be displayed. Each display rack assembly also includes a hanger mount that enables each display rack coupled thereto to be mounted to a structural support in a plurality of orientations. As a result, an assembly is provided which facilitates displaying blister packages in a cost-effective and reliable manner.

[0028] Various alternative embodiments to the embodiments illustrated in Figures 2-5 are possible and contemplated. For example, rather than being mounted to a structural support, a plurality of display racks could be mounted to

each other to form a free-standing display assembly. Furthermore, the cross-sectional profile of each rail and/or other display rack components, such as the hanger mount, could be in one of many different various selected shapes to facilitate improved displaying of consumer goods. Moreover, although many of the components are described and illustrated as having the same generally J-shaped cross-sectional profile, the components could have square or planar shapes that include channels formed therein where appropriate. In addition, each component need not have the same planar shape.

[0029] Exemplary embodiments of display rack assemblies and blister packages are described above in detail. The methods for displaying consumer goods are not limited to the specific embodiments described herein, but rather, aspects of each display rack assembly may be utilized independently and separately from other display rack assemblies described herein. For example, each display rack assembly component can also be used in combination with other display rack assembly components.

[0030] While the invention has been described in terms of various specific embodiments, those skilled in the art will recognize that the invention can be practiced with modification within the spirit and scope of the claims.